



Long ago, different people round the world told stories about how the universe began. Their stories explained how the sun and moon were created. They explained why shooting stars and comets sometimes flew across the sky at night.

The Cherokee people of North America told this story about the galaxy called the Milky Way.

Long ago, our planet was a great island floating on a big sea. The sky was tied to Earth by long ropes.

At night, there were no stars to accompany the moon on its journey across the sky at night. And when the moon wasn't in the sky, everything was black. There was no Milky Way.

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# Facts About Comets

Thousands of years ago, people believed that a bright comet racing across the sky was a sign of war, disease or even death. But today we know that comets are not signs of bad things to come. They are natural objects that make up part of our enormous universe.

## What Are Comets?

Comets are huge pieces of ice that form in outer space. Dust, pieces of rock and gases are trapped inside the ice. This ice is often called a 'dirty snowball'. A comet's centre, which is called a nucleus, may be only a few kilometres (several miles) wide. Comets travel in egg-shaped orbits at the far, far edges of our solar system where they cannot be seen.

## Why Do We See Some Comets?

Sometimes comets change their orbits and move closer to the sun. The sun's heat melts some of the ice. Gases and dust trapped inside float out. These form a large cloud around the nucleus. Some of the gases and dust form a long tail, which always points away from the sun. This tail glows and we can see it shining in the night sky.



## Halley's Comet

Halley's Comet, named after the scientist Edmund Halley, may be the most famous comet. After seeing this comet once, Halley figured out that comets travel on certain paths and that we would see Halley's Comet every 76 years, when it is close to the sun. Scientists used a spacecraft to take pictures of the comet when it returned in 1986. The next time it will appear is 2061.